## Uitwerken van haakjes (Distributiviteit)

###  Basis oefeningen

$$3\left(x+y\right)=3x+3y$$

|  |  |
| --- | --- |
|  Video op Youtube | Interactieve Oefening  |
| $$4\left(x-y\right)+3\left(x+y\right)=$$ | $$2\left(3x-y\right)-2\left(3x+2y\right)=$$ |
| $$2\left(a-2b\right)-3\left(a+2b\right)=$$ | $$2\left(x-y\right)\left(x+y\right)=$$ |
| $$2\left(x-2y+z\right)+3\left(x+2y-3z\right)=$$ | $$2\left(x-(3-2y)\right)+3\left(x+3y\right)=$$ |
| $$5(a-b)(a-2b)=$$ | $$2\left(3x-2y\right)-3\left(4x+3y\right)=$$ |
| $$\left(2x-y\right)\left(x+3y\right)=$$ | $$2\left(xy+2z\right)+3\left(xy-2z\right)=$$ |

### Reken uit met gebruik van distributiviteit

$$12 x 7=\left( 10+2 \right) x 7=10 x 7+2 x 7=70+14=84$$

|  |  |
| --- | --- |
| 103 x 8 =  | 69 x 7 = |
| 88 x 9 = | 301 x 9 = |
| 40 x 13 = | 51 x 12 = |
| 78 x 9 = | 1005 x 12 = |
| 31 x 18 = | 29 x 11 = |

### Optellen eentermen veeltermen

$$x+2x=3x en 2x^{2}+3x^{2}=5x^{2}$$

|  |  |
| --- | --- |
| Video op Youtube | Interactieve Oefening  |

|  |  |
| --- | --- |
| $$x+6x=$$ | $$x^{2}+2x-2x^{2}+x=$$ |
| $$2x^{2}-2x^{2}+1=$$ | $$4x^{2}y+3xy-3x^{2}y+2xy=$$ |
| $$4x^{2}y+2x-5x^{2}y+2xy=$$ | $$3x^{2}-4x-3x^{2}+4x=$$ |
| $$4x^{2}z+3xz-3x^{2}z-3xz=$$ | $$x^{4}+2x^{2}-3x^{3}+2x+ x^{2}+2x-3x^{2}+x=$$ |
| $$-3x+5x=$$ | $$x^{3}-3x^{3}+x=$$ |

### Vermenigvuldigen eentermen veeltermen

$$2x.x=2x^{2} en x.3x^{2}=3x^{3}$$

|  |  |
| --- | --- |
| Video op Youtube | Interactieve Oefening  |

|  |  |
| --- | --- |
| $$x(x+6)=$$ | $$(x^{2}+3x)(3x^{2}+x)=$$ |
| $$x^{2}(x^{2}+2)=$$ | $$(4x^{2}+3)(3x^{2}-2)=$$ |
| $$(4x^{2}-2)(3x^{3}+2)=$$ | $$(3x^{2}-2)(3x^{2}+3)=$$ |
| $$(4x^{2}-2x)(3x-2)=$$ | $$(x^{4}-3x^{3}-x)( x^{2}+2x-1)=$$ |
| $$-3x.5x=$$ | $$\left(x^{3}-1\right).x=$$ |